

Amendment to the Claims:

1-2. (Cancelled)

3. (Currently Amended) A method of communicating with a medical device, ~~in which~~including an analog/digital interface ~~is provided~~having contacts to which either an analog sensor plug or a digital external device plug can be connected and ~~via which analog measured signals or digital data are transmitted from the sensor or the external device, respectively, to the medical device,~~ the method comprising:
- 5 operating the analog/digital interface in a measurement mode when the analog sensor plug is connected and in a communication mode when the external device plug is connected;
- 10 changing over between the measurement mode and the communication mode automatically depending on whether the analog sensor plug or the external device plug is connected to the analog/digital interface;
- 15 in the communication mode, digitally transmitting a software update from the connected external device into the medical device via the analog/digital interface and digitally transmitting stored digital measurement data from the medical device to the external device via the analog/digital interface; and
- in the measurement mode, transmitting analog signals from the connected sensor into the medical device via the analog/digital interface.

4-16. (Cancelled)

17. (Currently Amended) ~~[[The]]~~ A medical device ~~as claimed in claim 20, wherein the interface includes which receives analog data from an analog sensor in a measurement mode and communicates digitally with a digital external device in a communication mode,~~ the medical device comprising:
- 5 a set of contacts, the contacts being configured to receive (1) an analog sensor plug connected by a lead to the analog sensor, and (2) a digital device plug connected by a lead with the digital external device, the contacts being configured such that the contacts can only connect with one of the analog sensor plug and the digital external device plug at a time; and

- 10 a switch which assumes one state in response to receiving the analog sensor plug and another state in response to receiving the digital external device plug.

18-20. (Cancelled)

21. (Currently Amended) The method as claimed in claim 3, further including:

measuring electrical parameters of received digital and analog signals received by the analog/digital interface and switching between the measurement mode
5 and the communication mode in response to the measured electrical parameters of the received signals.

22. (Currently Amended) The method as claimed in claim 21, wherein detecting the electrical parameters includes detecting-analyzing the received signals to determine whether the received signals are digital and changing over to the communication mode in response to the received signals being digital.

23. (Currently Amended) The method as claimed in claim 3, further including:

replacing an interface of an existing medical device which is unable to
communicate digital-digitally with the digital external device with the analog/digital
5 interface in order to provide digital communication between the existing medical device and the digital external device.

24. (Currently Amended) The medical device as claimed in claim
2017, wherein the processing unit further including:
a processor programmed to implement a software routine
to detect [[the]] digital data.

25. (Currently Amended) A system for communicating with a medical device, the system comprising:

at least one sensor ~~configured to sense~~ which senses bodily functions of a patient and ~~transmit along~~ transmits analog electrical sensor signals, the sensor
5 being connected with a sensor plug;

an external digital device ~~configured to~~ which digitally ~~transmit~~ transmits digital software ~~updates~~ update signals from the external device to the medical device and ~~[[to]]~~ digitally ~~receive~~ receives data from the medical device via an external digital device plug; and

10 the medical device including an interface ~~configured to receive~~ which receives the analog data from sensors and transmit sensor signals and which transmits and receives digital software update signals to and from the digital external device, the interface comprising:

a set of contacts ~~configured to~~ which connect with both
15 the analog sensor plug and the external digital device plug one at a time;

a processor ~~unit configured~~ programmed to detect whether ~~the digital data is~~ software update signals are being transmitted via the interface, automatically change from an analog measurement mode to a digital communication mode ~~when in response to detecting the digital data is detected~~ software update signals;

20 such that in the measurement mode, analog sensor signals are transmitted from a sensor into the medical device and in the communications mode, the digital software update signals are
25 transmitted ~~to and from~~ the external device.

26. (Cancelled)

27. (Currently Amended) The system as claimed in claim 25, further including:

a switch controlled by the ~~processing unit~~ processor to switch the interface between the measurement mode and the communications mode.

28. (New) The method as claimed in claim 3, further including:

determining physical properties of the plug to determine whether to assume the communication mode or the measurement mode.

29. (New) The medical device as claimed in claim 17, wherein one of the analog sensor plug and the digital device plug includes a mechanical construction which, in response to the one plug being connected to the contacts causes the switch to change states.

30. (New) The medical device as claimed in claim 17, wherein one of the analog sensor plug and the digital device plug includes a magnet which, in response to the one plug being connected to the contacts causes the switch to change states.

31. (New) The medical device as claimed in claim 17, further including:

a processor programmed to (1) analyze signals received from the plug connected with the contacts to determine if signals received at the contacts are analog or digital and (2) operate the switch in accordance with the determination.

32. (New) The medical device as claimed in claim 17, further including:

an operating mode circuit that monitors and evaluates signals received from the plug connected to the contacts to determine electrical parameters of the received signal at the contacts to determine whether the received signal is analog or digital.

33. (New) The system as claimed in claim 25, wherein the processor is further programmed to:

analyze the digital software update signals to determine whether the received signals are digital and the analog sensor signals to determine whether the
5 received signals are analog.